



UNITED STATES PATENT AND TRADEMARK OFFICE

Cell

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/023,736

12/21/2001

Hironari Masui

500.34763CX4

4547

24956

7590

01/23/2006

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, STEVEN H D

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/023,736	MASUI ET AL.	
	Examiner	Art Unit	
	Steven HD Nguyen	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/4, 6/4, 12/1</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 20, 22 and 24 objected to because of the following informalities:

As claim 20, line 1, "base station in a" should be deleted.

As claim 20, line 2, "terminal" should be changed to – terminals --.

As claim 22, line 1, "terminal in a" should be deleted.

As claim 24, line 6, "stations" should be changed to – terminals --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 26-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As claim 26, line 22, "said busy tone information" is vague and indefinite because it does not refer to any previous element.

There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is

Art Unit: 2665

appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 18-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2-3 of U.S. Patent No. 6393013 in view of Chang (IEEE).

Regarding claims 18-21, Claim 2 of Patent '013 discloses a base station and mobiles comprising a reservation channel and traffic channel; mobile transmits a reservation packet to the base station via the reservation channel and the base station generates a busy tone for transmitting to the mobiles based on a traffic channel state information and number of received reservation packet in order to control the transmission of reservation packet from the mobiles. However, Patent '013 does not disclose the reservation and traffic channel between the base station and mobile in according to the CDMA scheme. In the same field of endeavor, Chang discloses a spread aloha system which use a busy tone to control transmitting of the packets from the mobiles to the base station in according to CDMA (Page 1322, left col. from "to prevent" to "user buffer").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for generating a busy tone signal for transmitting to the mobiles in order to control the transmission of the packets from the mobile to the base station as disclosed by Chang into Patent '013. The motivation would have been to prevent the system to be overloaded.

Regarding claims 22-27, Claim 3 of patent '013 discloses a busy tone value calculation routine which receives from a base station a busy tone signal and an upward schedule control routine which receives traffic state information from said busy tone value calculation routine to control issuance of reservation packets. However, Patent '013 does not disclose a means for transmitting a reservation packet on the reservation channel when the terminal has a request for transmitting data and generating a busy tone based on traffic state information of the present time and next time period "see formula of the claim" and wherein the channel use CDMA scheme. In the same field of endeavor, Chang discloses a spread aloha system which use a busy tone to control transmitting of the packets from the mobiles to the base station in according to CDMA and transmitting a request for initiating packet transmission based on the received busy tone information (Page 1322, left col. from "to prevent" to "user buffer").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for generating a busy tone signal for transmitting to the mobiles in order to control the transmission of the packets from the mobile to the base station as disclosed by Chang into Patent '013. The motivation would have been to prevent the system to be overloaded.

Art Unit: 2665

6. Claims 18-24 and 26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 7-14, 20-22, 25 and 28 of U.S. Patent No. 6269088 in view of Chang (IEEE).

Claims 1, 5, 7-14, 20-22, 25 and 28 of patent '088 discloses a base station and mobiles forming a reservation and reply channel each assigned a unique spreading code that common to the mobiles and traffic channel is assigned a unique spreading code. However, Patent '088 fail discloses transmitting a busy tone from base station via reply channel or another channel that dedicated to the busy tone information; the mobile uses the busy tone information to control the transmission of reservation packet. In the same field of endeavor, Chang discloses a spread aloha system which use a busy tone to control transmitting of the packets from the mobiles to the base station in according to CDMA and transmitting a request for initiating packet transmission based on the received busy tone information (Page 1322, left col. from "to prevent" to "user buffer").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for generating a busy tone signal for transmitting to the mobiles in order to control the transmission of the packets from the mobile to the base station as disclosed by Chang into Patent '088. The motivation would have been to prevent the system to be overloaded.

7. Claims 18-24 and 26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5 and 9 of U.S. Patent No. 6570865 in view of Chang (IEEE).

Art Unit: 2665

Claims 1, 5, 9 of patent 6570865 discloses a base station and mobiles forming a reservation and reply channel each assigned a unique spreading code that common to the mobiles and traffic channel is assigned a unique spreading code. However, Patent '865 fail discloses transmitting a busy tone from base station via reply channel or another channel that dedicated to the busy tone information; the mobile uses the busy tone information to control the transmission of reservation packet. In the same field of endeavor, Chang discloses a spread aloha system which use a busy tone to control transmitting of the packets from the mobiles to the base station in according to CDMA and transmitting a request for initiating packet transmission based on the received busy tone information (Page 1322, left col. from "to prevent" to "user buffer").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for generating a busy tone signal for transmitting to the mobiles in order to control the transmission of the packets from the mobile to the base station as disclosed by Chang into Patent '865. The motivation would have been to prevent the system to be overloaded.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amitay (USP 5371780) in view of Chang (IEEE).

Regarding claims 18-23, Amity discloses a system comprising a base station and mobiles forming a reservation and traffic channels in CDMA scheme wherein mobile request for a channel when it has a request for data transmission (Fig 1, Col. 6, lines 29-50). However, Amitay fails to disclose a base station generates a busy tone based on traffic state information in order to control transmission of the reservation packets from mobiles. In the same field of endeavor, Chang discloses a spread aloha system which use a busy tone to control transmitting of the packets from the mobiles to the base station in according to CDMA and controlling the mobile issuing a request for initiating packet transmission based on the received busy tone information (Page 1322, left col. from “to prevent” to “user buffer”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for generating a busy tone signal for transmitting to the mobiles in order to control the transmission of the packets from the mobile to the base station. The motivation would have been to prevent the system to be overloaded.

Conclusion

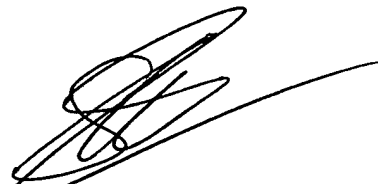
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Zhang (IEEE) discloses a CDMA system for allowing the mobiles to transmit reservation packet to base station and receiving a reply packet includes channel assignment for allowing the wining mobile to transmit a data packet. The other mobiles will be restrained from sending another reservation packet based on distributed with parameter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'Steven HD Nguyen', with a long horizontal line extending to the right.

Steven HD Nguyen
Primary Examiner
Art Unit 2665
January 9, 2006